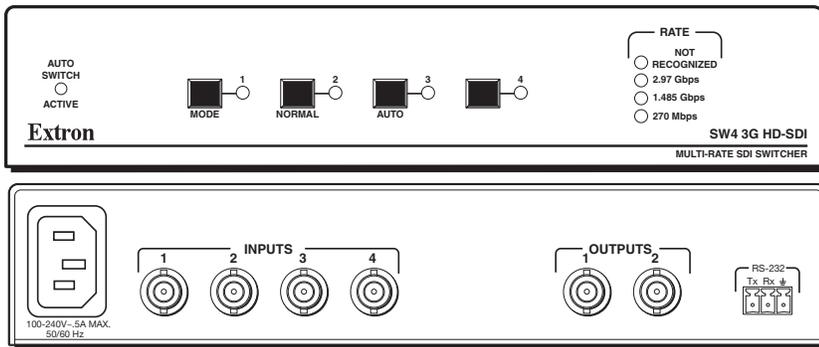# SW4 3G HD-SDI Setup Guide

IMPORTANT:
Refer to www.extron.com for the user manual and installation instructions before connecting the product to the power supply.

The Extron® SW4 3G HD-SDI switcher is a four input, two parallel output, multi-rate switcher. It allows up to four SDI or HD-SDI video input sources to be switched to two identical outputs, on female BNC connectors. The SW4 HD-SDI supports multiple SDI rates, including 270 Mbps, 1.485 Gbps, and 2.97 Gbps. In auto-input switch mode, the SW4 3G automatically switches to the highest numbered input with active sync pulses.

This guide provides basic instructions for an experienced installer to set up and operate this switcher.

Installation

1. Turn off all of the equipment and disconnect it from the power source.
2. (Optional) If desired, mount the switcher on a 6 inch or 9.5 inch deep rack shelf.
3. Connect up to four SDI, HD-SDI, or 3G-SDI video inputs to BNC input connectors 1 through 4.

   NOTE: Each input is equalized regardless of the rate.

4. Connect one or two video SDI, HD-SDI, or 3G-SDI output devices to the rear panel BNC output connectors.

   NOTE: Outputs 1 and 2 output identical signals.

5. If the switcher will be connected to a computer or host controller for remote control, wire the provided 3-pole captive screw connector to an RS-232 cable. Connect the RS-232 cable to the RS-232 port on the rear panel of the switcher and to the host RS-232 port (see the illustration at right).

   Protocol for the RS-232 port: 9600 baud, 8 data bits, 1 stop bit, no parity

6. Power on the input and output devices, then connect power to the switcher by connecting the provided IEC power cord to the switcher power connector and to an AC outlet.
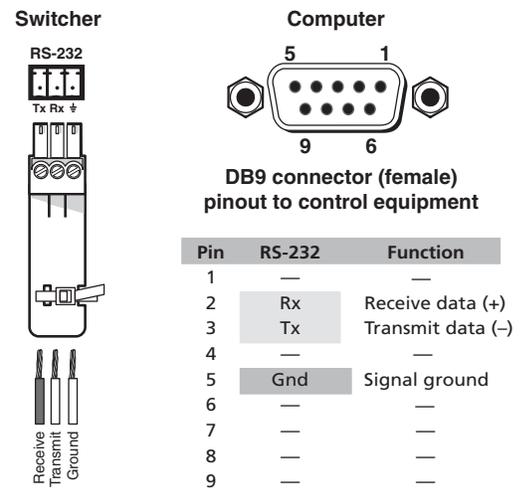

Switcher

Computer

DB9 connector (female) pinout to control equipment

Pin	RS-232	Function
1	—	—
2	Rx	Receive data (+)
3	Tx	Transmit data (–)
4	—	—
5	Gnd	Signal ground
6	—	—
7	—	—
8	—	—
9	—	—

Figure 1. RS-232 Connection

Connecting an Input to the Outputs

To create a tie between an input and the outputs:

1. Determine the necessary switch mode for the SW4 3G (the default mode is **normal**). (See "Enabling and Disabling Auto-input Switch Mode," on the reverse side.)
   - o Select auto-input switch mode to automatically switch to the highest numbered input with active sync pulses.
   - o Choose normal mode to manually change the input.
2. Select an input.
   - o If you are using normal mode, select the desired input by pressing and releasing its input button. The LED beside the selected input button lights.
   - o To switch to another input, press a different input button.
   - o If you are using auto-input switch mode, no action is necessary. The switcher automatically switches to the highest numbered active input.
3. If needed, create a remote connection via RS-232. (See step **5** under "Installation," above.)

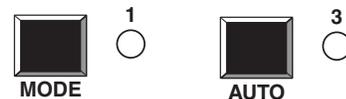## Enabling and Disabling Auto-input Switch Mode

In auto-input switch mode, the SW4 3G automatically switches to the highest numbered input with active sync pulses. When auto-input switch mode is enabled, the Auto Switch Active LED (shown at right) lights.

AUTO
SWITCH
◯
ACTIVE

Selecting Auto-input Switch Mode
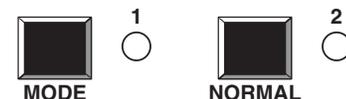
To turn **on** auto-input switching:

1. Press and hold the **Mode (Input 1)** button.
2. While holding down the Mode button, press and hold the **Auto (Input 3)** button.
3. Release the Mode and Auto buttons simultaneously. The Auto Switch Active LED lights.

Selecting Normal Mode

To turn **off** auto-input switching:

1. Press and hold the **Mode (Input 1)** button.
2. While holding down the Mode button, press and hold the **Normal (Input 2)** button.
3. Release the Mode and Auto buttons simultaneously. The Auto Switch Active LED turns off.

Application Diagram

The illustration below shows an example of how the SW4 3G HD-SDI switcher can be connected.
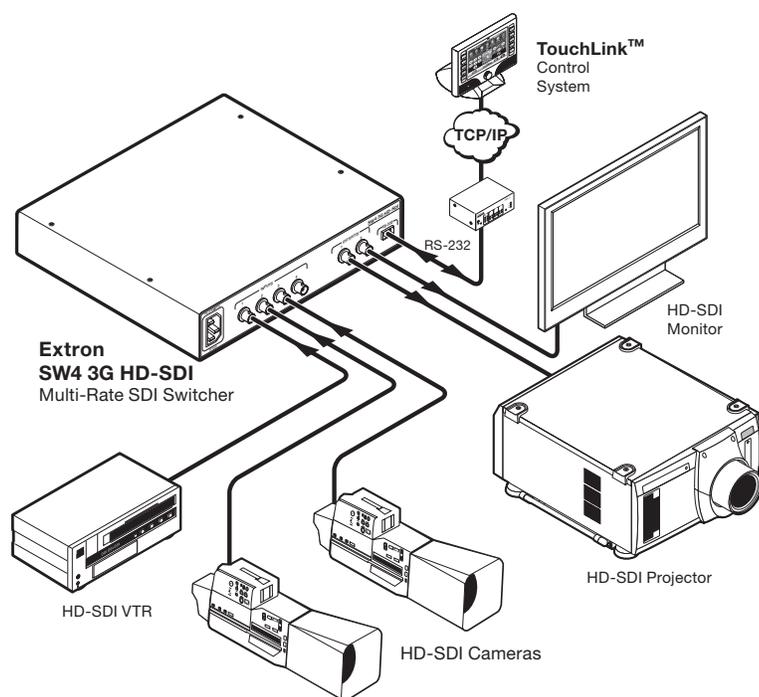
Figure 2. SW4 3G HD-SDI Application Example